State Clean Diesel Grant Program-DERA

Adam Page
BAQ Planning and Assessment Section
SCDHEC
October 27, 2008

Diesel Emissions Reduction Act (DERA)

>State Grant Program

Competitive Sub-grant Process



Diesel Exhaust – What's in it?

- Particulate Matter (PM)
- Nitrogen oxides (NOx)
- Volatile Organic Compounds
- Other Hydrocarbons
- Sulfur Oxides (SOx)
- Air Toxins (benzene, dioxins, formaldehyde, polycyclic aromatic hydrocarbons (PAHs)) – over 40

Why Reduce Diesel Emissions?

- Contributes to serious public health problems:
- Identified as an asthma trigger and a carcinogen
- High NOx emissions critical to reduce to help meet tighter ozone standards.
- Large contributor to PM pollution reductions will help to meet standards.

Why Reduce Diesel Emissions? Cont'd

- Children's lungs still developing – more susceptible than healthy adult to exposure.
- Children breath 50% more air per pound of body weight than adults.



State Clean Diesel Grant

- Congress appropriated \$49.2 million under the Energy Policy Act of 2005 to achieve reduction in diesel emissions. A portion was set aside for state programs.
- Program intended to be funded annually.
- S.C. participated in this program and the matching portion.
- Total amount available for the competitive grant program - \$246,327.

Sub-Grant Process

- Awards based on:
 - ✓ Matching/In-kind funds
 - Expected benefits (emissions reductions)
 - Cost-effectiveness (emissions vs. cost of implementation)
 - ✓ Location of the planned project
 - ✓ Sustainability and innovation

Eligible Entities

Private Organizations

Universities

Businesses



County, City, or other local government

Project Possibilities

- Eligible Fleets and Equipment:
 - Buses, medium-duty or heavy-duty trucks
 - o Marine engines or locomotives
 - o Off-road engines or vehicles used in construction, agriculture, mining, handling of cargo, or energy production (ex: generator sets)



Project Possibilities (Contd.)

- Eligible Projects include:
 - o Retrofit technologies
 (<u>www.epa.gov/cleandiesel</u> select *Verified technology list*)
 - o Engine repowers, rebuilds, or replacements
 - o Idle reduction technologies (APUs, Truck Stop Electrification...)
 - o Emerging technologies
 (<u>www.epa.gov/cleandiesel</u> select *emerging technology list*)
 - o Cleaner Fuels

Legacy Fleet = Target





Why Target the Legacy Fleet?

- Although more stringent emissions standards are taking effect for on road and off road engines the "Legacy Fleet" is still in circulation.
- These engines will continue to emit large amounts of pollutants for years to come affecting many areas in our state and their ability to stay in attainment with National Ambient Air Quality Standards.

- For example, a 175horsepower bulldozer emits as much particulate matter (PM) as 500 new cars.
- Retrofitted with a DPF 50 new cars (~90% reduction)



Important Dates

- Notification of Funding October 2008
- Request for Proposals November 2008
- Submittal Deadline December 19, 2008
- Review Committee Selects Projects to Award January 2009
- Announcement of Awards February 2009

Contacts:

Adam Page

Phone: (803) 898-1423

email: pageac@dhec.sc.gov

Brian Barnes

Phone: (803) 898-7099

email: barnesbk@dhec.sc.gov

Nelson Roberts

Phone: (803) 898-4122

email: robertln@dhec.sc.gov